Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.(previously presented) A process for filling a via hole in a layer of FSG, having an upper surface, comprising the sequential steps of:

depositing the layer of FSG on a substrate;

depositing a layer of USG on only the entire upper surface;

patterning and then etching only said USG and FSG layers, whereby a via hole, having walls and extending as far as the substrate, is formed;

depositing a seed layer on the walls of the via hole;

overfilling the via hole with a material; and

by means of CMP, removing said material until said USG layer is reached.

2.(original) The process described in claim 1 wherein the FSG layer is deposited to a thickness between about 0.2 and 1 microns and contains between about 3 and 10 atomic % fluorine.

3.(original) The process described in claim 1 wherein the USG layer is deposited to a thickness between about 0.1 and 0.2 microns and acts as an end-point detector during CMP.

4.(original) The process described in claim 1 wherein the step of depositing the USG layer further comprises using PECVD from silane or TEOS at about 400 °C.

5.(original) A process for forming a single damascene connector, comprising the sequential steps of:

providing a partially completed integrated circuit and then depositing thereon a layer of FSG having an upper surface;

depositing a layer of USG on said upper surface;

on the USG layer, depositing a layer of silicon oxynitride for use as an anti-reflection coating;

patterning and then etching said oxynitride, USG, and FSG layers, thereby forming a via hole extending as far as said integrated circuit;

depositing a barrier layer on all walls of the via hole;

depositing a copper seed layer on said barrier layer;

overfilling the via hole with copper; and

by means of CMP, removing the copper until said USG layer is reached, thereby forming said damascene connector.

6.(original) The process described in claim 5 wherein the step of depositing the USG layer further comprises using PECVD from silane or TEOS at about 400 °C .

7.(original) The process described in claim 5 wherein the USG layer is deposited to a thickness between about 0.1 and 0.2 microns.

8.(original) The process described in claim 5 wherein the step of removing the copper until said USG layer is reached further comprises optical detection of the USG layer through a change in reflectivity.

9.(original) A process for forming a dual damascene connector, comprising the sequential steps of:

providing a partially completed integrated circuit and then depositing thereon a layer of silicon nitride;

on said layer of silicon nitride, depositing a layer of FSG having an upper surface;

depositing a layer of USG on said upper surface;

on the USG layer, depositing a layer of silicon oxynitride for use as an anti-reflection coating;

patterning and then etching said oxynitride, USG, and FSG layers, thereby forming a trench in said upper surface;

patterning and then etching said FSG layer, including said trench, whereby a via hole extending as far as said layer of silicon nitride is formed inside said trench;

selectively removing the layer of silicon nitride;

depositing a barrier layer on all walls of said trench and said via hole;

depositing a copper seed layer on said barrier layer;

overfilling said via hole and said trench with copper; and

by means of CMP, removing the copper until said USG layer is reached, thereby forming said damascene connector.

10.(original) The process described in claim 9 wherein the layer of silicon nitride is deposited to a thickness between about 300 and 1,000 Angstroms.

11.(original) The process described in claim 9 wherein the layer of silicon oxynitride is deposited to a thickness between about 400 and 1,500 Angstroms.

12.(original) The process described in claim 9 wherein the step of removing the copper until said USG layer is reached further comprises optical detection of the USG layer through a change in reflectivity.

13-22 (canceled).